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D. of M.	A.O.	CG	CC & M.	D.S. & E.
RECEIVED				Registrar
ANSWERED				E & IL
9 FEB 1977				
DEPT OF MINES				
REF. No.				

E X P L O R A T I O N   R E P O R T

Q U A R T E R L Y   A N D   F I N A L

BY

MINSANDS EXPLORATION PTY. LTD.

EXPLORATION LICENCE E.L. 19/76

RINGAROOMA BAY

AMG REFERENCE POINTS ADDED

## INTRODUCTION

Under the Mining Act, 1929, Minsands Exploration Pty. Ltd. was issued an Exploration Licence E.L. 19/76, in respect to twenty-four (24) square kilometres of land in the Land District of Dorset in the vicinity of Ringarooma Bay. This licence would remain in force until 6th February, 1977.

The objective of the Company was to carry out exploratory drilling with the view to locating economic deposits of mineralised sand. A programme utilizing hand augering methods was devised to test the area. It was implemented during the period from 8th to 30th November, 1976.

## ACCESS

There was sufficient access for the initial programme since several of the farm roads did reach the sand mass (refer plan).

## GEOLOGY

The sand mass under investigation is confined to north by a large headland of dolerite rock (Petal Point) and to the east by a dolerite plateau, Ringarooma Tier. The Ringarooma River borders the area in the south.

In the area, there are three (3) systems in which sand has accumulated. They are firstly, a frontal dune system; secondly, a windblown system and thirdly, a system of intervening marshes, swamps and lagoons.

The frontal dune system is a complex combination of an older frontal dune (primary dune) whose form has been greatly modified by blowouts and a smaller frontal dune (secondary dune) of a younger age. A maximum height of fifteen (15) metres is attained by the primary dune and a maximum height of five (5) metres for the secondary dune.

At times, the blowouts developed from the primary dune extend across the swamps and marshes that lie behind the frontal dune system and are connected to some of the windblown dunes. Stunted bushes and trees constitute the vegetation of the primary dune whereas grasses are only observed on the secondary. The smaller frontal dune in general, is better developed southwards along the beach, whereas the primary frontal dune decreases in height in that direction except where the frontal dune system is transected by creeks. These creeks are traps for the accumulation of sand brought along the beach by the northerly longshore current. At these traps, the primary frontal dune is highest on the southern bank and from there its height decreases to the south. In most holes drilled in this system of dunes, coarse sand was intersected at water table and is probably remnant of an old beach.

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GEOLOGY cont'd.

The windblown dune system consists of blowouts some of which are still actively transgressing across swamps and marshes and onto, and at times dissecting, the Ringarooma Tier. These east-west dunes have resulted from several generations of blowouts which have, at times, developed at the expense of preceding ones. Supporting this idea are the old dune surfaces, recognised as grey loamy horizons, which are frequently intersected by drilling and the complex clusters of dune ridges intermittently developed along the western margin of the Ringarooma Tier. Several large complex blowouts are active - one in the north east and one in the south of the area. A maximum height of twenty (20) metres is attained by some windblown ridges whose lengths vary to 2.5 kilometres. The windblown ridges are concentrated in the northern part of the sand mass and are the result of sand being trapped by the rocky headland, i.e. the same process prevails as for the primary frontal dune. The alternating layers of coarse and fine sand in the windblown dunes near the dolerite plateau can be attributed to erosion of the plateau giving rise to a coarse layer being deposited perhaps grading into finer one and that the rest of the fine material is derived by windblown processes.

DRILLING

A total of eighty (80) holes were drilled as shown in attached plan. The total metreage for this hand augering programme was 341 metres (i.e. average depth of each hole 4.25m.) with a maximum depth of any hole being nine (9) metres. The total number of samples collected was 244 taken at 1.5 metre intervals.

MINERALISATION

To the south of the exploration licence numerous alluvial tin deposits and several old gold workings are to be found. The constituent heavy minerals of economic significance are Rutile, Zircon, Tin and Monazite (refer Table 1). In general, only low grade values of heavy mineral were intersected by drilling (refer sections).

The samples were assayed <sup>where?</sup> for heavy mineral content and several bulks were made up to assess by XRF the Rutile, Zircon, Monazite and Tin.

	<u>H.M. %</u>	<u>R +</u>	<u>Z +</u>	<u>M +</u>	<u>Sn +</u>
Bulk No. 1	1.42	0.63	1.33	0.76	0.04
Bulk No. 2	0.64	0.30	0.89	0.47	0.06

+ in Heavy Minerals

Several problems were encountered in assaying the heavy mineral content. These were that many samples were salty and that many samples contained substantial amounts of shell grit.

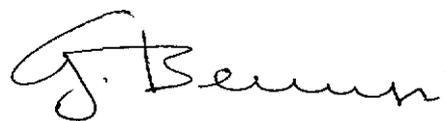
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EXPENDITURE INCURRED IN E.L. 19/76 TO 12.1.1977

Labour and Contract Labour	\$ 2,870.00
Stores Used	46.21
Vehicle Charges	710.54
Printing and Stationery	14.60
Travel and Accommodation	1,186.12
Postage, Phones and Freight	212.09
Sundry Overheads	<u>11.00</u>
	\$ 5,050.56

RECOMMENDATIONS

It is concluded on the basis of the low grade values of heavy mineral in the windblown dunes that there is no economic mineralisation and hence that further testing would be fruitless. Consequently, it is my opinion that the exploration licence over the area should be surrendered.

  
G. Benussi,  
Manager.

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CAPE PORTLAND  
AMG 578900E  
5489250N

PETAL PT.

RINGAROOMA  
BAY

Datum post

Rushy  
Lagoon

Beach  
Boobyalla

TIER

RINGAROOMA  
TIER

Bowler's  
Lagoon

RINGAROOMA RIVER.

AMG 577080E  
5474650N

LEGEND

-  Drill lines
-  Windblown dune system.
-  Frontal dune system.
-  Large active blowouts.
-  Rock.
-  E.L. Boundary.
-  Tracks
-  Dune ridges

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E.L. 19/76. RINGAROOMA BAY, TASMANIA.

GEOLOGY and DRILL HOLE PLAN.

SCALE:  
1:40,000

004

DATE:  
13.12.76

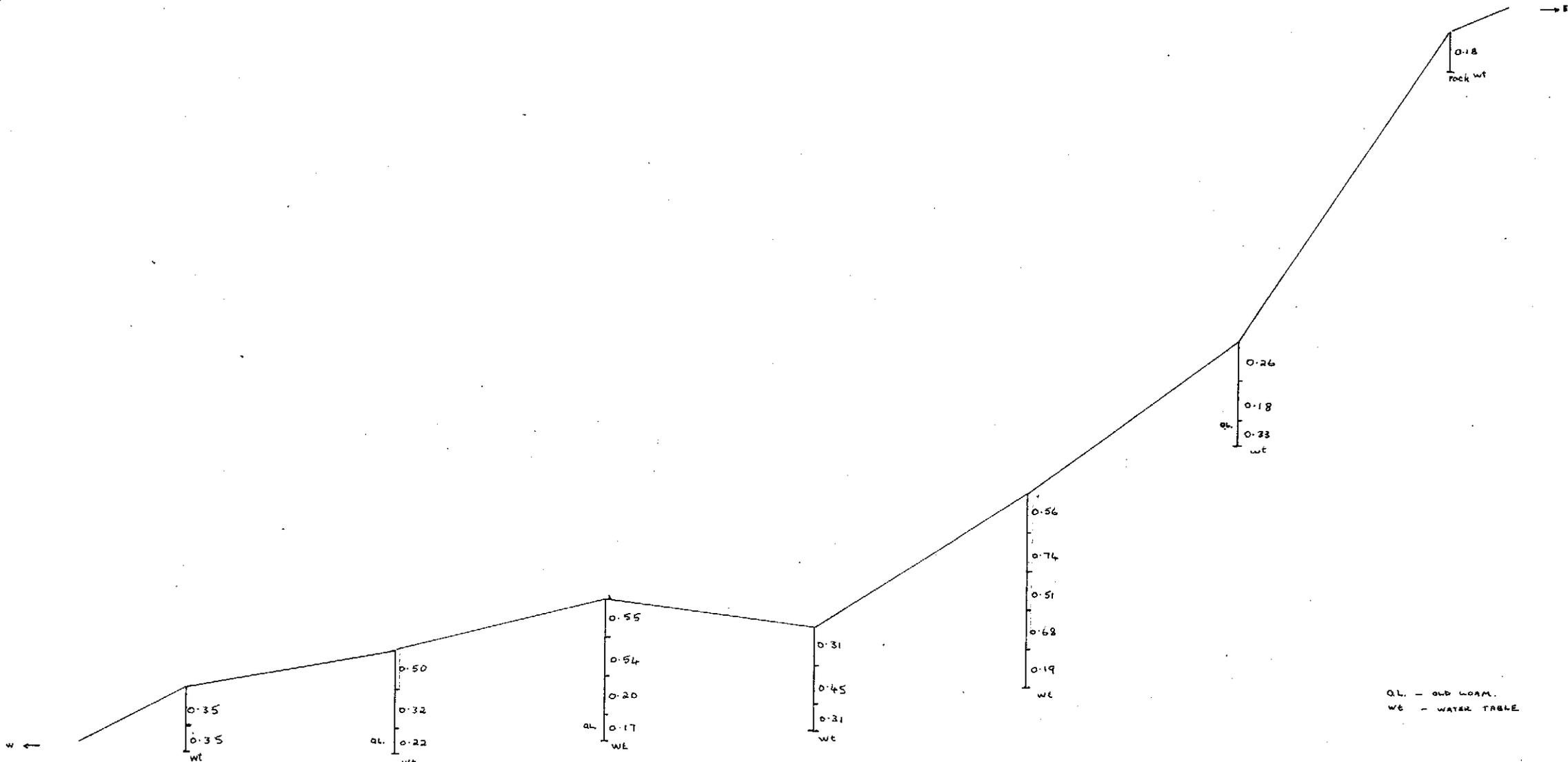
DRAWN BY:

5 cm

AMG REFERENCE POINTS ADDED

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E.L. 19/76. RINGAROOMA BAY, TASMANIA.

SECTION A

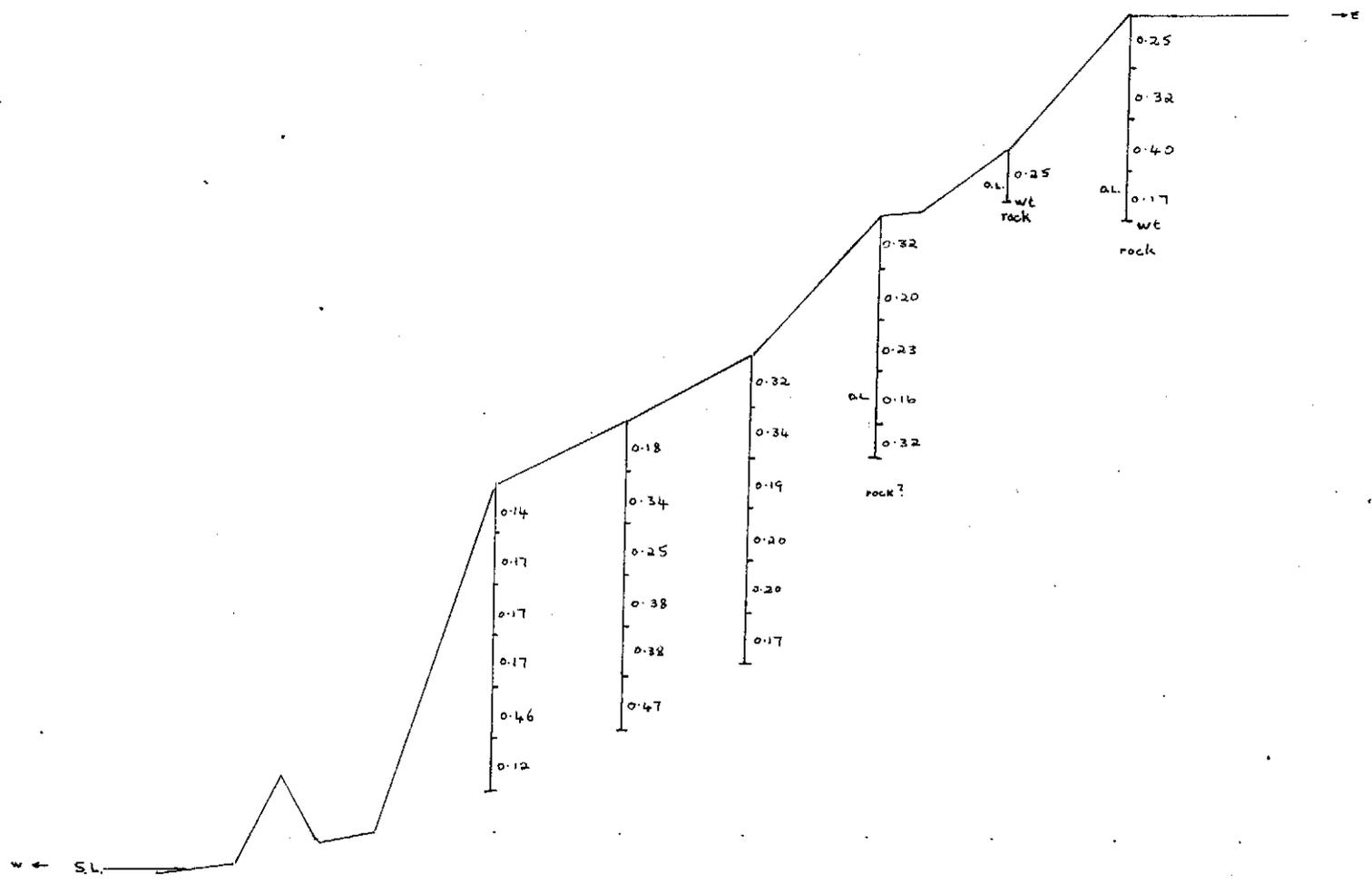
5 cm

325006

Scale:  
V: 1:200  
H: 1:5000

10.12.76

007



AL. - OLD LOGS  
 WT - WATER TABLE

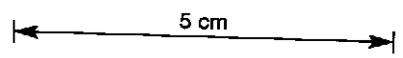
77-1199

MINSANDS EXPLORATION PTY. LTD.

E.L. 19/76. RINGAROOMA BAY, TASMANIA.

SECTION A

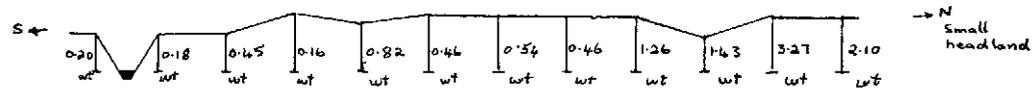
325007



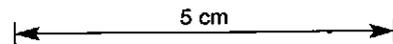
Scale:  
 V: 1:200  
 H: 1:12500

10.12.76

008



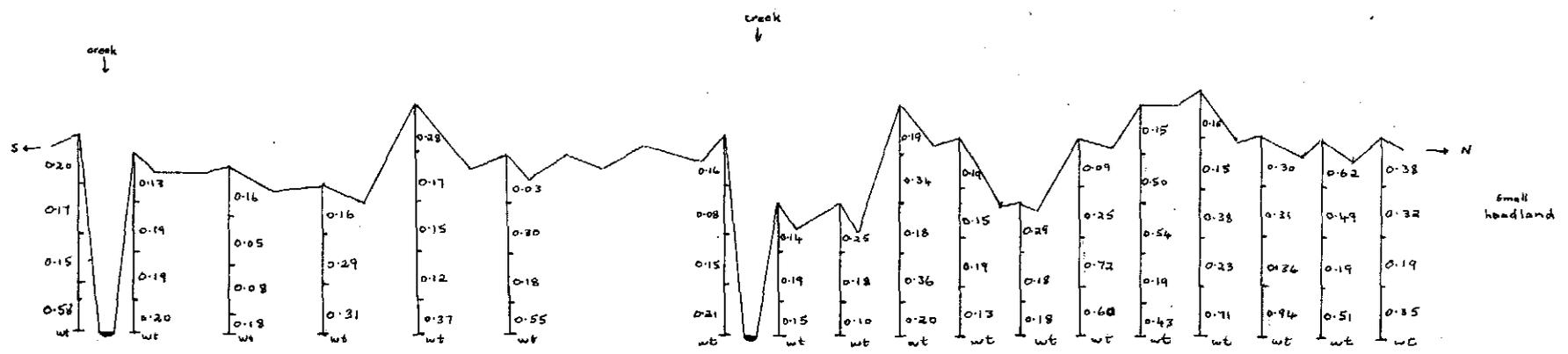
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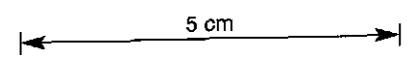
MINSANDS EXPLORATION PTY. LTD.			
E.L. 19/76. RINGAROOMA BAY, TASMANIA.			
SECTION B'			
At base of frontal dune			
Scale:			
V. 1:200			
H. 1:25,000		10.12.75	<i>DTZ</i>

20



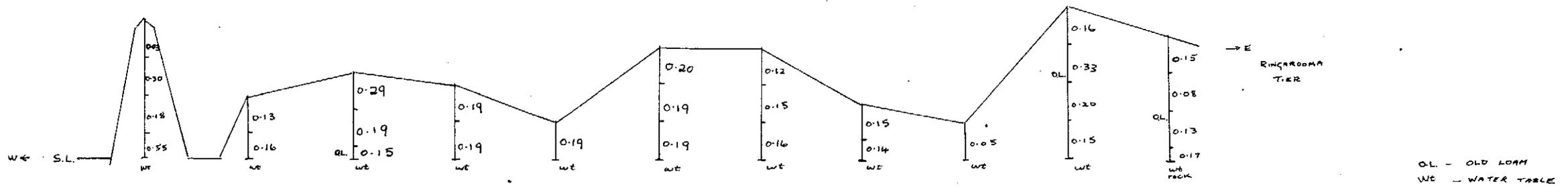
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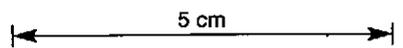
MINSANDS EXPLORATION PTY. LTD.			
E.L. 19/76. RINGAROOMA BAY, TASMANIA.			
SECTION B			
Frontal dune system			
Scale: V. 1:200 H. 1:25000		10.12.76	<i>[Signature]</i>

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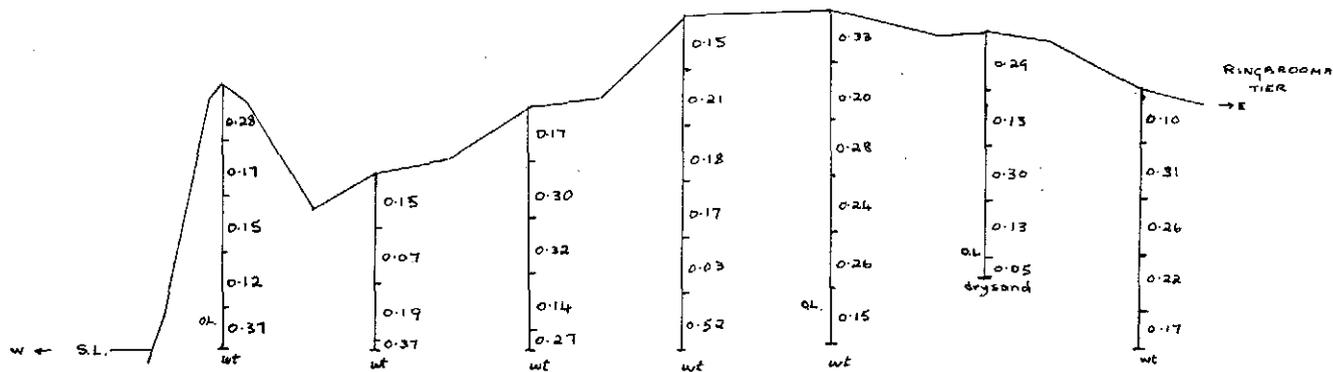
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MINSANDS EXPLORATION PTY. LTD.			
E.L. 19/76. RINGAROOMA BAY, TASMANIA.			
SECTION C			
Scale: V. 1:200 H. 1:10,000		10.12.76	<i>[Signature]</i>

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OL - OLD LOAM  
WT - WATER TABLE

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MINSANDS EXPLORATION PTY. LTD.

E.L. 19/76. RINGAROOMA BAY, TASMANIA.

SECTION C'

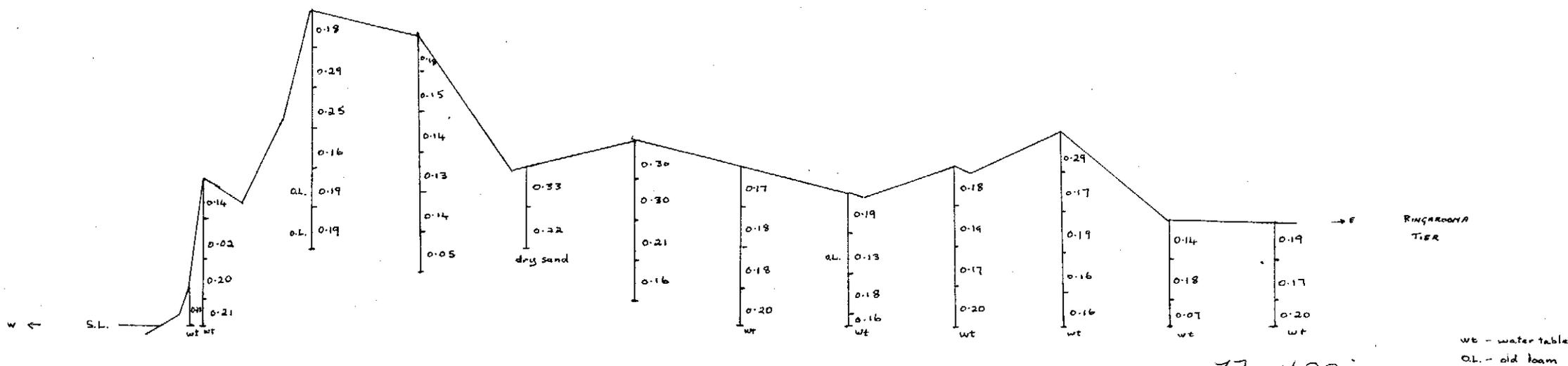
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5 cm

Scale:  
V. 1:200  
H. 1:10,000

10-12-76

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MINSANDS EXPLORATION PTY. LTD.

E.L. 19/76. RINGAROOMA BAY, TASMANIA.

SECTION D

325012

5 cm

Scale:  
V 1: 200  
H 1: 10,000

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